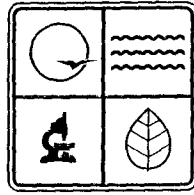


STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **01 2 0 0 6 - 0 1 8** Project Number: **2005-12-031**

Owner: **Sandy Ridge Cotton Company**

Owner's Address: **P.O. Box 543, Malden, Missouri 63863**

Installation Name: **Sandy Ridge Cotton Company**

Installation Address: **22355 County Road 102, Malden, Missouri 63863**

Location Information: **Dunklin County, S21, T23N, R10E**

Application for Authority to Construct was made for:

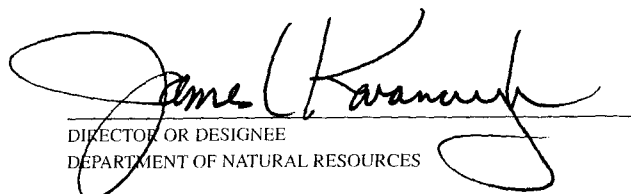
Sandy Ridge Cotton Company has applied for authority to construct additional ginning equipment including a tower dryer, a stick machine, gravity cleaner, lint cleaner, and other associated equipment. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

☐ Standard Conditions (on reverse) are applicable to this permit.

☒ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

JAN 30 2006

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional Office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

Page No.	2
Permit No.	
Project No.	2005-12-031

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Sandy Ridge Cotton Company
Dunklin County, S21, T23N, R10E

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 042005-027) from the Air Pollution Control Program.
2. **Emission Limitation**
 - A. Sandy Ridge Cotton Company shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM₁₀) in any consecutive 12 month period from the entire installation.
 - B. Sandy Ridge Cotton Company shall maintain an accurate record of PM₁₀ emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. Sandy Ridge Cotton Company shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - C. Sandy Ridge Cotton Company shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2.B indicate that the source exceeds the limitation of Special Condition Number 2.A.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2005-12-031
Installation ID Number: 069-0072
Permit Number:

Sandy Ridge Cotton Company
22355 County Road 102
Malden, Missouri 63863

Complete: December 29, 2005
Reviewed: January 9, 2006

Parent Company:
Sandy Ridge Cotton Company
P.O. Box 543
Malden, Missouri 63863

Dunklin County, S21, T23N, R10E

REVIEW SUMMARY

- Sandy Ridge Cotton Company has applied for authority to construct additional ginning equipment including a tower dryer, a stick machine, gravity cleaner, lint cleaner, and other associated equipment.
- Hazardous Air Pollutant (HAP) emissions are expected from the combustion of natural gas, but in negligible quantities.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Cyclones are being used to control the particulate matter less than ten (10) microns in diameter (PM₁₀) emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels.
- This installation is located in Dunklin County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed since potential emissions of the

application are conditioned below de minimis levels.

- Emissions testing is not required for the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Sandy Ridge Cotton Company operates a cotton gin in Malden, Missouri. The facility uses cyclones to control PM₁₀ emissions. The facility has a bottlenecked maximum design rate of 35 bales per hour by the lint cleaners. The facility is designed with excess capacity for future expansions.

The facility is a de minimis source under construction permits and no operating permit is required. Permit 042005-027 has been issued to Sandy Ridge Cotton Company from the Air Pollution Control Program.

PROJECT DESCRIPTION

Sandy Ridge Cotton Company is applying for the authority to construct additional cotton processing equipment as listed below.

8 Million BTU Burner	144" Wide Cotton Vacuum Wheel 22-1/2" Rotor
10" x 30" Rock Catcher	60-E Hot Air Pull Fan No. 2B
10" x 30" Pneumatically Operated Trash Valve	144" Wide Gravity Cleaner
48" Wide Tower Drier with 27" Deep Shelf Spacing	Majestic 8000 Feeder
144" Wide Hot Air Cleaner	Majestic 170 Saw Gin
144" Wide Cotton Vacuum Wheel 22-1/2" Rotor	Pneumatic Jet Lint Cleaner
80-HE Hot Air Pull Fan No. 1B	Regal 112 RFB Lint Cleaners
144" Wide Steady Feed Cotton Dispersion Hopper	50-C4 Lint Cleaner Condenser Pull Fan
144" Wide Stick Machine	20" x 54" Up Packing Press
144" Wide Cotton Vacuum Wheel 22-1/2" Rotor	60" 1D-3D Cyclone
4 Million BTU Burner	18' x 36' Overhead Seed Storage
144" Wide Hot Air Cleaner	

The current 20" x 54" down packing press is being removed. With these additions the ginning maximum hourly design rate will be 50 bales per hour. The new lint cleaner is controlled by the new 60" 1D-3D cyclone. The existing plenum and bank cyclone will control the new tower drier, stick machine, and the gravity cleaner. The cyclone bank was built with eight (8) 62" 1D-3D cyclones although three (3) are not being used. The extra cyclones will be used with the proposed additions.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.7 *Cotton Ginning* (6/96). No additional emission points are associated with the emission units being constructed. The additions de-bottleneck the gin, increasing the hourly throughput. This increase in throughput will cause a proportional increase in emissions therefore the previous analysis composite emission factor (0.8052 pounds of PM₁₀ per bale) is applicable. Potential emissions of the application represent the potential increase of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions*	Potential Emissions of the Application	Installation Wide Conditioned Potential
PM ₁₀	15.0	130.70	N/D	40.07	< 15.0
SO _x	40.0	0.01	N/D	0.00	N/A
NO _x	40.0	1.90	N/D	0.16	N/A
VOC	40.0	0.10	N/D	0.01	N/A
CO	100.0	1.60	N/D	0.13	N/A
HAPs	10.0/25.0	0.04	N/D	0.00	N/A

N/A = Not Applicable; N/D = Not Determined

* Existing actual emissions have not been determined as the facility is just recently built.

The Air Pollution Control Program may approve site specific emission factors for the equivalent emission points pending appropriate stack testing procedure. The Air Pollution Control Program's Enforcement Section should be contacted prior to conducting any testing. Unless such tests are approved, the composite emission factor will be used to show compliance with Special Condition 2(A).

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Sandy Ridge Cotton Company shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Michael Sanchez
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated December 8, 2005, received December 19, 2005, designating Sandy Ridge Cotton Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southwest Regional Office Site Survey, dated December 27, 2005.

Attachment A – PM₁₀ Compliance Worksheet

Sandy Ridge Cotton Company
Dunklin County, S21, T23N, R10E
Project Number: 2005-02-105
Installation ID Number: 069-0072
Permit Number: _____

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Copy as needed.

[illegible]

Note 1: Monthly total number of bales produced.

Note 2: Composite PM₁₀ emission factor.

Note 3: Column 1 x Column 2 x 0.0005.

Note 4: Sum of last 12-months of Column 3*.

*A 12-Month Total PM₁₀ emissions total of less than 15 tons for Column 4 indicates compliance.